Livestock Grazing Management Project
Soda Creek/North Butte Allotment

Noxious Weed Risk Assessment

Almanor Ranger District
Lassen National Forest

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Introduction:

The Livestock Grazing Management Project decision will continue an existing Term Grazing Permit for the Soda Creek/North Butte Allotment (SC/NBA). This Noxious Weed Risk Assessment (NWRA) evaluates the risks of weed introduction and dispersal that exist in the SC/NBA project area.

A general Noxious Weed Risk Assessment (NWRA) has been done for the three-Forest Herger-Feinstein Quincy Library Group (HFQLG) pilot project area. The SC/NBA NWRA has been developed from the General Outline of a Risk Assessment contained in the HFQLG Final Environmental Impact Statement (FEIS), Appendix G, Table G-1, and is tiered from the general NWRA, Appendix G (1999). The general NWRA contains background information that applies to this SC/NBA NWRA and should be reviewed as it pertains to this risk assessment. The General Outline of a Risk Assessment provided in the HFQLG FEIS is a guide for evaluating risks and explains the components, variations and risks (high, moderate, and low) which make up this risk assessment. NWRAs can often be subjective and reviewing the Outline of a Risk Assessment (HFQLG FEIS Appendix G, Table G-1) is helpful as it pertains to this document (1999).

Non-Proposed Action Dependent Factors

1. Inventory:

The SC/NBA project area encompasses 28,837 acres of the Plumas and Butte Counties southwest of Chester, California. About 95% of the acreage (27,267 acres) is National Forest System (NFS) land. The area has been surveyed in the past for various projects (Table 1)—noxious weed surveys were done in conjunction with rare plant surveys for these projects.

Table 1: Past Surveys Conducted in the Soda Creek/North Butte Allotment Analysis Area

Project	Survey Date
TU-1	July & August, 2002
Adams Windthrow Fuels Reduction	September, 2003
Eagle Windthrow Fuels Reduction	September, 2003
Creeks Forest Health	August & September, 2004
Young Pine Plantations	August, 2004
Willow	July, August, & September, 2005
Scotts John	August & September, 2007

2. Known Noxious Weeds: The California Department of Food and Agriculture's noxious weed list (http://www.cdfa.ca.gov/phpps/ipc/encycloweedia/encycloweedia_hp.htm) divides noxious weeds into categories A, B, and C. A-listed weeds are those for which eradication or containment is required at the state or county level. For B-listed weeds, eradication or containment is at the discretion of the County Agricultural Commissioner. C-listed weeds require eradication or containment only when found in a nursery or at the discretion of the County Agricultural Commissioner. One CDFA B-listed noxious weed species, Canada thistle (*Cirsium arvense*), is known from within the SC/NBA project area. Two C-listed

weed species, yellow starthistle (*Centaurea solstitialis*) and bull thistle (*Cirsium vulgare*), are known from the area within the allotment.

North Butte Allotment--

Canada thistle (*Cirsium arvense*): Canada thistle occurs at two locations with the North Butte Allotment. Near Scotts John Creek about three quarters of a mile east of its confluence with Butte Creek three stems were removed in 2005 (LNF#32), and no new stems were found in 2009. In 2007, several Canada thistle stems were seen rooted among boulders in Butte Creek about a half-mile northwest of Butte Creek House (LNF#35)—the site has not been treated.

Soda Creek Allotment--

Yellow starthistle (*Centaurea solstitialis*): In 2004 yellow starthistle plants were found scattered along the Humbug Road about a half-mile west of Little Grizzly Campground (LNF#96). Fifteen plants were removed, and annual checks since then have not found any new plants.

Canada thistle (*Cirsium arvense*): Canada thistle occurs along Yellow Creek a little less than two air miles northwest of Little Grizzly Campground (LNF#23). A thousand or so plants were discovered on a semiwooded old gravel bar on the north side of the creek in 2004. The plants are about a quarter-mile down a rather step slope and have not been treated.

Bull thistle (*Cirsium vulgare*): Bull thistle plants were seen near the north side of Yellow Creek, a little less than two air miles north-northwest of Little Grizzly Campground, in 2007 (LNF#12). The plants have not been treated.

3. Habitat Vulnerability: The SC/NBA project area encompasses 28,837 acres of Plumas and Butte Counties southwest of Chester, California. About 95% of the acreage (27,267 acres) is National Forest System (NFS) land. The Soda Creek Allotment includes the upper watersheds of Yellow, Grizzly, and Soda Creeks, along with their associated tributaries. The North Butte Allotment includes the upper watershed of Butte Creek and its tributaries. The landscapes of both allotments are characterized by moderate to steep slopes at elevations between about 4600 and 7100 feet. The slopes are clothed in westside mixed conifer or red fir forest, with interspersed, sometimes extensive patches of montane chaparral and small dry to wet meadows and riparian corridors. The forests and chaparral have a generally more or less closed canopy and are therefore not particularly vulnerable to noxious weed invasion. The area has been influenced by numerous disturbance activities over the years, including timber harvest and fire as well as grazing. Weeds are most likely to invade and spread along riparian corridors. Despite this, the land is so thickly forested that the allotments have overall a naturally low current vulnerability to weed problems.

4. Non-Project Dependent Vectors: Motor vehicle travel poses a non-project risk of noxious weed spread in the project area. Nonetheless, the yellow starthistle occurrence west of Little Grizzly Campground is the only weed occurrence in the allotments that is directly associated with a road. Off-road OHV use and woodcutting can disperse weed seeds away from roads, and wildlife such as deer can

disperse weed seeds that stick to their hair or hooves or are deposited in their droppings. Nonetheless, the overall risk of noxious weed invasion from non-project dependent vectors across the project area is probably quite low.

Proposed Action Dependent Factors

5. Habitat Alteration Expected as a Result of Project: The SC/NBA decision will continue the existing grazing allotment management plan. The SC/NBA is administered with a Term Grazing Permit that sets a ceiling of 109 Animal Unit Months (AUMs) on Forest Service lands. The season of use may vary between from June 1st and September 15th. The SC/NBA decision will modify the permit to allow variability in the numbers and type of livestock and in dates and times when authorized by a Forest Officer within a permitted limit. For details of the Proposed Project see the Environmental Assessment for the Soda Creek/North Butte Allotments, hereby incorporated by reference. The permittee will be responsible for the maintenance of two existing fences and a water development as well as a soon-to-be-installed exclosure on North Fork Willow Creek and planned new fencing at Milkhouse Flat along L-T Creek. Assuming that range conditions continue to move toward the desired condition, there will be no substantial change in grazing activity or range improvements on the SC/NBA, and therefore the risk of associated weed dispersal due to habitat alteration is low.

6. Increased Vectors as a Result of Project Implementation: While cattle can certainly act as weed dispersal vectors, this decision continues already existing grazing agreements, so no increase of weed dispersal is anticipated as a result of it. Two fences and a water development are due to be maintained, some new fences are to be installed, and there is to be no increase in cattle usage, so the risk of increased associated weed dispersal is low.

7. Integrated Design Features: The following Integrated Design Features (IDFs) will greatly reduce the risk factors described in this document, keeping the project risk low in the SC/NBA.

1) Known noxious weed infestations will be identified and mapped for the allotment. Identified noxious weed sites within or adjacent to the allotment containing isolated patches with small plant numbers will be evaluated and treated according to the species present and project constraints.
2) Salt blocks and staging or gathering areas will be placed outside of known weed sites.
3) Only certified weed-free hay, straw and/or mulch, and feed pellets, rolled grains, or certified weed-free cubes are authorized to be used on the Forest, as per current national policy (FSM 2080.03(3)). Under the same policy, seed mixes used for revegetation of disturbed sites will consist of locally adapted native plant materials to the extent practicable.
4) If monitoring indicates a need for change in management strategies to eradicate noxious weeds, the plan (AMP) will be modified.

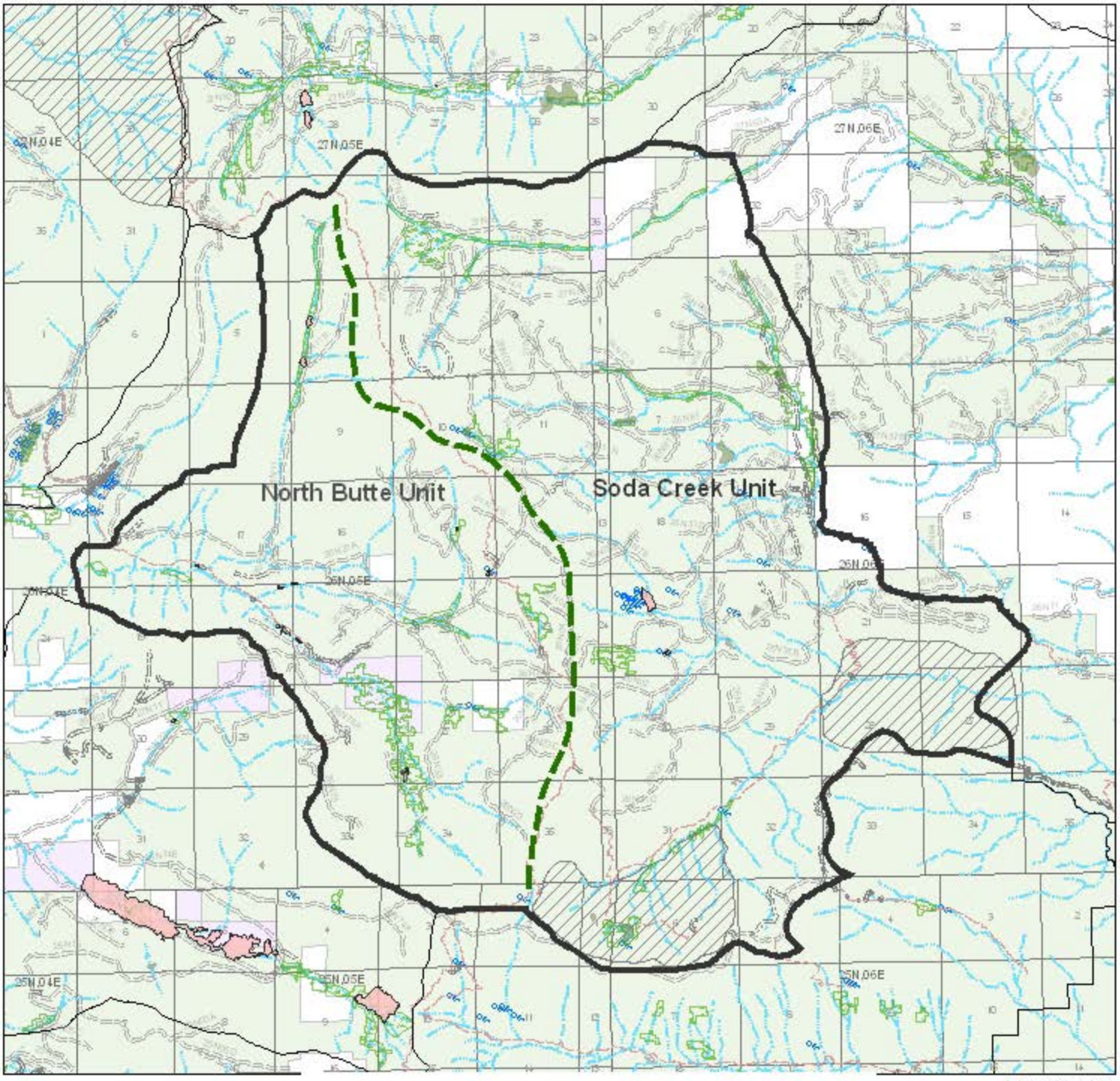
8. Anticipated Weed Response to Proposed Action: The SC/NBA project area contains three sites of Canada thistle, a CDFA B-listed noxious weed species with moderate priority for treatment In addition, two C-listed weed species with low priority for treatment, yellow starthistle and bull thistle, also have occurrences inside the SC/NBA. Creek corridors are somewhat vulnerable to noxious weed invasion, but the landscape is dominated by slopes clothed in weed-resistant heavy forest and chaparral or overall vulnerability is low. Non-project vectors, project related habitat alteration, and increased project-related vectors also carry a low risk of noxious weed spread in the project area. Overall, with incorporation of Integrated Design Features as part of the Proposed Action, there is a low potential for weed spread with the implementation of the Livestock Grazing Management Project decision for the Soda Creek/North Butte Allotment (Table 2).

Table 2: Summary of Risk Factors for the Livestock for the Soda Creek/North Butte Allotments.

Non-proposed Action Dependent Factors	
Known Noxious Weeds	Two low-priority species and one moderate-priority species present: prevention of spread within the project area high priority
Habitat Vulnerability	Low current vulnerability
Non-project Dependent Vectors	Low current vulnerability
Proposed Action Dependent Factors	
Habitat Alteration Expected as a result of the Project	Low risk
Increased Vectors as a Result of Project Implementation	Low risk
Integrated Design Features	Greatly reduced risk
Anticipated Weed Response to the Proposed Action with implementation of IDFs	**Low potential for weed spread**

9. Costs: Noxious weeds can reduce the value of public lands. They can negatively impact timber production, grazing, wildlife habitat, and recreational opportunities. Attempted control or containment of established noxious weeds is also expensive and time consuming. Therefore, prevention and control of small infestations are the most cost effective strategies in the long-term. In summary, noxious weed surveys, control of small infestations, and post project monitoring are vital in reducing the overall impacts and costs from noxious weeds.

Soda Creek/North Butte Allotment



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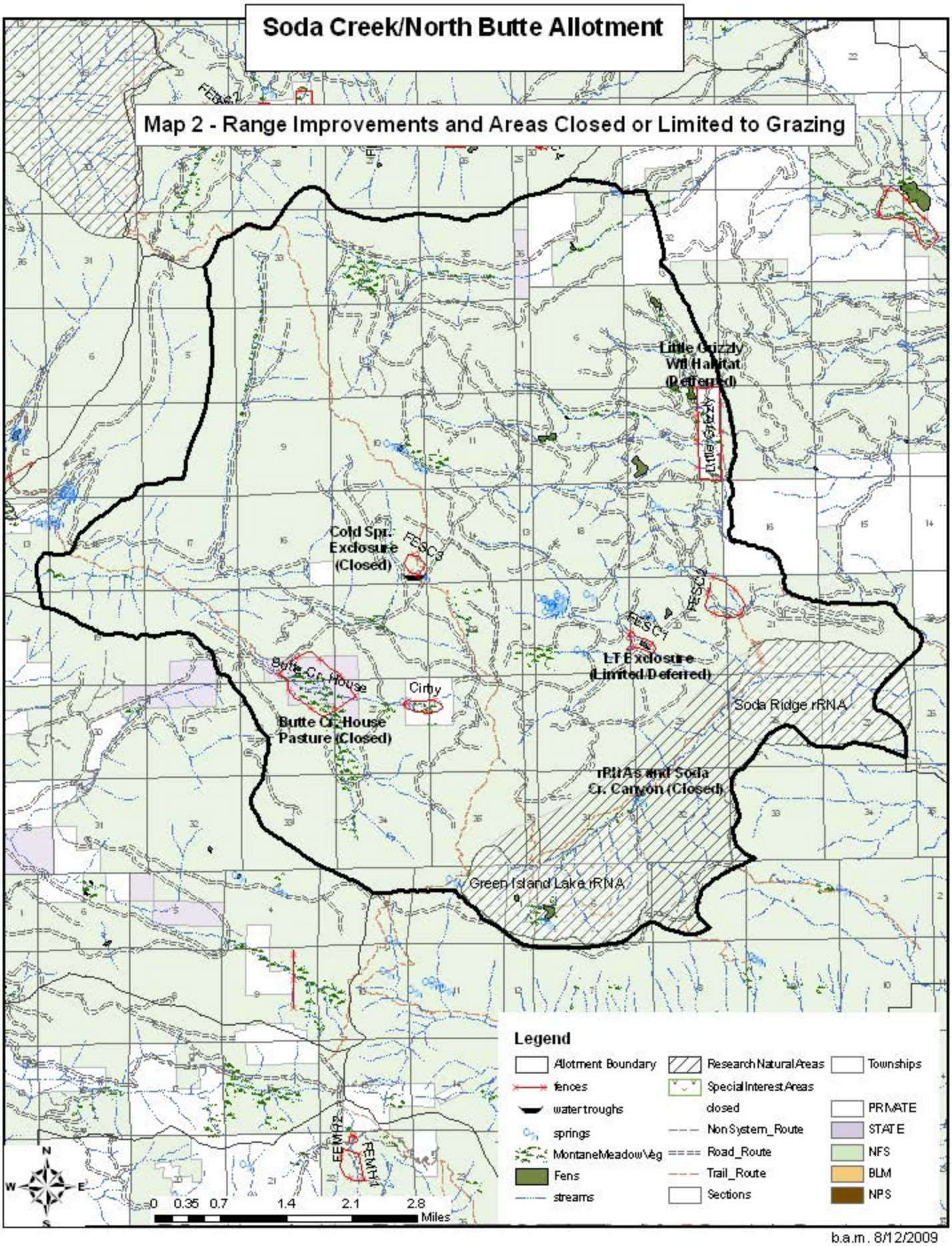
Legend

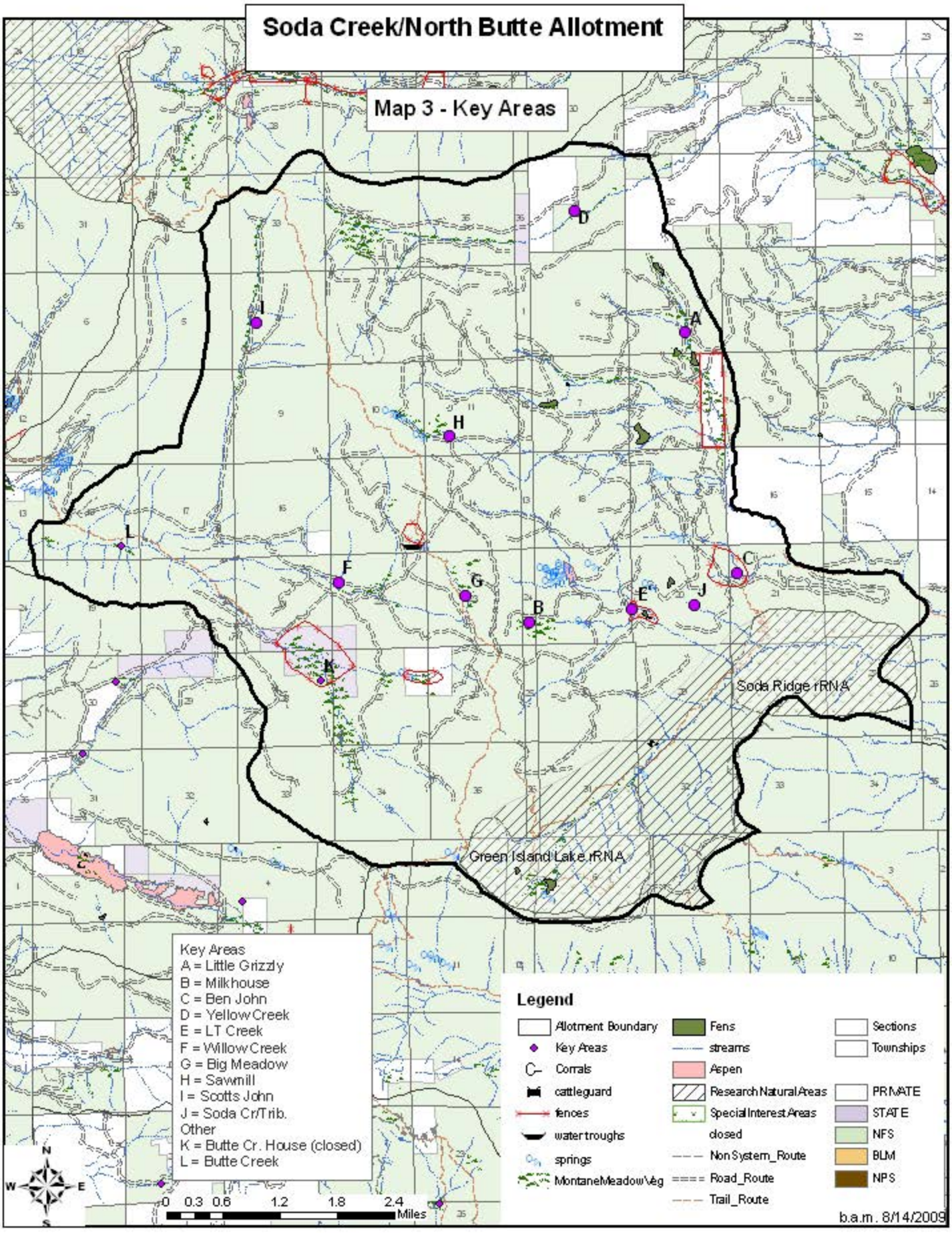
- Allotment Boundary
- Aspen
- Fens
- MontaneMeadow\Veg
- Research Natural Areas
- Roads
- Non System_Route
- Trail_Route
- springs
- Streams
- Townships
- Sections
- Private
- State
- NFS
- BLM
- NPS
- Unit/division boundary

N W E S

0 0.25 0.5 1 1.5 2 Miles


Soda Creek/North Butte Allotment
Map 2 - Range Improvements and Areas Closed or Limited to Grazing
Little Grizzly Wtl Habitat (Deferred)
Little Grizzly
Cold Spr. Exclosure (Closed)
FESC3
FESC2
FESC1
LT Exclosure (Limited/Deferred)
Butte Cr. House
Cirby
Butte Cr. House Pasture (Closed)
Soda Ridge rRNA
rRtAs and Soda Cr. Canyon (Closed)
Green Island Lake rRNA
FEMH2
FEMH1
Legend
Allotment Boundary
fences
water troughs
springs
MontaneMeadow\Veg
Fens
streams
Research Natural Areas
Special Interest Areas
closed
Non System_Route
Road_Route
Trail_Route
Sections
Townships
PRIVATE
STATE
NFS
BLM
NPS
N
W
E
S
0 0.35 0.7 1.4 2.1 2.8
Miles

b.a.m. 8/12/2009


Soda Creek/North Butte Allotment
Map 3 - Key Areas
A
B
C
D
E
F
G
H
I
J
K
L
Soda Ridge rRNA
Green Island Lake rRNA
Key Areas
A = Little Grizzly
B = Milkhouse
C = Ben John
D = Yellow Creek
E = LT Creek
F = Willow Creek
G = Big Meadow
H = Sawmill
I = Scotts John
J = Soda Cr/Trib.
Other
K = Butte Cr. House (closed)
L = Butte Creek
N
W
E
S
0 0.3 0.6 1.2 1.8 2.4
Miles
Legend
Allotment Boundary
Key Areas
Corrals
cattleguard
fences
water troughs
springs
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